Technical Datasheet

6/26/2019

Model: AKA5512EXA

Product Description

Type: Reciprocating Compressors
Application: HBP/AC - Air Conditioning
ProductDescription: R-22
Voltage/Frequency: 115V ~ 60Hz 100V ~ 50Hz
Version: N/A

Product Specifications

Performance

		Refrigeration Capacity			Input Power	(E) Efficiency							
Condition	Test Voltage	(R) Btu/h	(R) kcal/h	(R) W	(I) W	(E) Btu/Wh	(E) kcal/Wh	W/W	EVAP TEMP	Condition	AMBIENT TEMP	RETURN GAS	LIQUID TEMP
ASHRAE (R-22)	115V ~ 60HZ	12000	3024	3516	1410	8.51	2.14	2.49	7.2°C (45°F)	54°C (130°F)	35°C (95°F)	35°C (95°F)	46°C (115°F)

General

Evaporating Temp. Range:	-23.3°C to 12.8°C (-10°F to 55°F)
Motor Torque:	Low Start Torque (LST)
Compressor Cooling:	Fan

Mechanical

Weight:	38
Weight Unit of Measure:	LB
Displacement (cc):	22.599
Oil Type:	Polyolester
Viscosity (cSt):	32
Oil Charge (cc):	512

Electrical

Voltage Range (50 Hz):	90-110
Voltage Range (60 Hz):	103-127
Locked Rotor Amps (LRA):	62
Rated Load Amps (RLA 50 Hz):	0
Rated Load Amps (RLA 60 Hz):	12.5
Max. Continuous Current (MCC in Amps):	16.8
Motor Resistance (Ohm) - Main:	.509

Motor Resistance (Ohm) - Start:	7.19
MotorType:	PSC
Overload Type:	
Relay Type:	

Agency Approval

cURus Recognized

Tecumseh

Performance Data Sheet

AKA5512EXA

General

Model	AKA5512EXA	**Unit of Measure**	Fahrenheit
Condition	ASHRAE	**Voltage/Frequency**	115V~60HZ
RETURN GAS	35°C (95°F) RETURN GAS	**MotorType**	PSC

Performance Information

EVAP TEMP (°F)		Condensing Temperature (°F)							
		80	90	100	110	120	130	140	150
-15	Btu/h								
	Watts								
	Amps								
	Lb/h								
-10	Btu/h								
	Watts								
	Amps								
	Lb/h								
-5	Btu/h								
	Watts								
	Amps								
	Lb/h								
0	Btu/h								
	Watts								
	Amps								
	Lb/h								
5	Btu/h								
	Watts								
	Amps								
	Lb/h								
10	Btu/h								
	Watts								
	Amps								
	Lb/h								
15	Btu/h								
	Watts								
	Amps								
	Lb/h								
20	Btu/h								
	Watts								
	Amps								
	Lb/h								
25	Btu/h								
	Watts								
	Amps								

	Lb/h	62100	62100	62100	62100	62100	62100	62100	62100
30	Btu/h								
	Watts								
	Amps								
	Lb/h	11200	11200	11200	11200	11200	11200	11200	11200
35	Btu/h	22200	22000	21700	21100	20300	19400	18400	17300
	Watts	8640	8800	8910	9010	9080	9130	9180	9220
	Amps	5660	5660	5660	5660	5660	5660	5660	5660
	Lb/h								
40	Btu/h	24300	24000	23400	22600	21600	20600	19500	18400
	Watts	8690	8840	8950	9040	9120	9180	9240	9300
	Amps	5660	5660	5660	5660	5660	5660	5660	5660
	Lb/h								
45	Btu/h	16700	16100	15300	14300	13200	12000	10800	9590
	Watts	914	1050	1160	1260	1340	1410	1480	1560
	Amps	6.96	8.58	9.79	10.7	11.4	11.9	12.4	13.0
	Lb/h	186	186	183	178	171	163	153	143
50	Btu/h	11600	10800	9720	8550	7280	5960	4640	3360
	Watts								
	Amps								
	Lb/h	6860	6860	6850	6850	6840	6830	6820	6810
55	Btu/h	21500	20400	19100	17700	16300	14800	13400	12000
	Watts	981	1110	1220	1320	1410	1510	1610	1720
	Amps	6.71	8.46	9.81	10.9	11.7	12.4	13.2	14.0
	Lb/h	243	238	231	222	213	202	191	180

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	-1.339487E+06	-1.036947E+06	-7.456337E+05	1.169402E+06
C2	9.437430E+04	7.405628E+04	5.342535E+04	-8.381450E+04
C3	7.194317E+02	9.794222E+01	9.370037E-01	8.805660E+00
C4	-2.172549E+03	-1.721176E+03	-1.242668E+03	1.949763E+03
C5	-9.444005E+00	-9.648922E-01	-1.430929E-03	-1.046203E-01
C6	-4.232495E+00	-5.638450E-01	-6.728971E-03	-4.841981E-02
C7	1.647664E+01	1.303709E+01	9.414138E+00	-1.477073E+01
C8	-8.026705E-03	2.016225E-03	1.204006E-05	-3.534346E-05
C9	2.990427E-02	3.913197E-03	8.612403E-06	3.523391E-04
C10	6.944546E-03	9.722163E-04	1.583340E-05	6.950073E-05

Value = C1 + C2 * Te + C4 * Te^2 + C7 * Te^3 + (C3 + C5 * Te + C8 * Te^2) * Tc + (C6 + C9 * Te) * Tc^2 + C10 * Tc^3

Te = Evaporator Temperature
Tc = Condensing Temperature